

311. Vascular effects of anticoagulants. M. Gábor and E. Dux  
*Acta physiol. Acad. Sci. Hung.*, 1956, 9, 273-281 (Hungaroed. Inst. and  
Pediatric Clinic., Med. Univ., Szeged, Hungary).—Capillary  
resistance was measured in rats by applying for 5 min. a suction of  
200 mg. Hg. to the depilated skin in the lumbar region and noting  
the time until petechiae appeared. Measurements were made before  
and 10 min. after the injection of heparin, glutathione, Germanin,  
Chicago-Blue 6B, Acelo-purpurine 8 B, lanthanum-Cl. All of them  
depressed capillary resistance. Previous administration of Toluidine  
Blue or protamine sulphate antagonised the resistance diminishing  
action of heparin.  
A. B. L. BEZNÁK.

SZOBADY, Istvan, dr.; GABOR, Miklos, dr.; SIPOS, Karoly, dr.

Effects of cortisone in experimental burns. Borgyogy. vener.  
szemle 10 no.2:79-81 March 56.

1. A Szegedi Orvostudomanyegyetemi Gyermekklinika igaz.: Waltner  
Karoly dr. (egyetemi tanar), Noi Klinika (igaz.: Batizfalvy Janos dr.  
egyetemi tanar) es Bor-es Nemibeteg Klinika (igaz.: Ravnay Tamas dr.  
egyetemi tanar) kozl.

(BURNS, exper.

inj. eff. on capillary permeability in rats, prev. by  
cortisone (Hun))

(CAPILLARY PERMEABILITY

inj. eff. of exper. burns in rats, prev. by cortisone  
(Hun))

(CORTISONM, eff.

prev. of inj. eff. of exper. burns on capillary permeability  
in rats (Hun))

GABOR, Miklos; HORVATH, Bertalan; KISS, Lajos

Study on the relationship of cardiac effect and chemical structure.  
Kiserletes orvostud. 8 no.2:113-120 March 56.

1. Szegedi Orvostudomanyi Egyesem Gyogyszertani es Korelettani  
Intezete.

(HEART, eff. of drugs on  
pyrone ring containing cpds., relation of cardiac  
eff. to chem. structure. (Hun))

EXCERPTA MEDICA Sec.2 Vol.10/6 Phy. Biochem. June 57

2674. GABOR M., SZÓRÁDY I. and SIPOS K. Orvostud. Egyetem Gyógyszertani Int., Gyermeklin. és Bőr- és Nemibeteg Klin., Szegedi. \*Höfinger által előidézett capillar permeabilitas változás befolyásolása pharmakonokkal. Effects of drugs on thermal changes in capillary permeability KISERL, ORVOSTUD. 1956, 8/2 (121-126) Tables 5  
Very wide individual variation in reactivity to thermal stimuli was observed in rat capillaries. A new method was evolved to avoid this difficulty and to make more exact investigation possible. Of the various drugs tested, calcium chloride, haematoxylin and butapryrine were found to have the most effect on the thermally increased capillary permeability. Chlorpyramine had to be given in a near-toxic dose to produce a comparable effect. It appears that antihistaminic action cannot be a decisive factor in the mechanism of the above effect.

GABOR, MIKLOS

HUNGARY/Human and Animal Physiology - Blood Circulation, Vessels.

P-6

Abs Jour : Dux, Erno; Gabor, Miklos  
Inst : -  
Title : The Significance of ACTH and Heparin in Regulating Capillaric Resistibility.  
Orig Pub : Kiserl. orvostud., 1957, 9, No 1, 62-64

Abstract : Heparin did not produce the usually observed decrease of capillaric resistibility in rats which received ACTH for some length of time. Both the ACTH-heparin complex and the cortisone-somatotropic hormone complex participate in regulating capillaric resistibility. -- From the authors' summary.

Card 1/1

- 55 -

GABOR MIKLOS, Dr.; ZELENKA, LAJOS, Dr.

Studies on the uterus contractive effects of strophanthin on isolated human uterus. Magy. noorv. lap. 22 no.2:118-120. 1957.

1. A Szegedi Orvostudomanyegyetem Szülestaneti és Gyogyaszati Klinikaja  
kozleménye (Igazsító Batisfalvy János dr. egyetemi tanár)  
(STROPHANTHIN, eff.

on uterus, contractive eff. on isolated human uterus (Hung)  
(UTERUS, eff. of drugs on  
strophantin, contractive eff. on isolated human uterus  
(Hung))

GABOF, Miklos; PIUKOVICH, Istvan

Behavior of the diphenylamine test in inflammations of the small pelvis and in pregnancy. Tuberkulozis 11 no.1-2:15-16 Jan-Feb 58.

1. A Szegedi Orvostudomanyi Egyesem Szulezeti es Nogyogyaszati Klinika-janak (igazgato: Batizfalvy Janos dr. egyetemi tanar) kozlemenye.

(CARBOHYDRATES, in blood

determ. by phenylaniline test in pregn., inflamm. of true pelvis & female genital tuberc., differ. diag. value (Hun)

(PREGNANCY, blood in

carbohydrate determ. by phenylaniline test, comparison with values found in inflamm. of true pelvis & female genital tuberc. (Hun)

(PELVIS, dis.

inflamm. of true pelvis, blood carbohydrate determ. by phenylaniline test, comparison with values found in pregn. & female genital tuberc. (Hun)

(TUBERCULOSIS, FEMALE GENITAL, blood in

carbohydrate determ. by phenylaniline test, differ. diag. value & comparison with values found in pregn & inflamm. of true pelvis (Hun)

GABOR, Miklos, Dr.; PIUKOVICH, Istvan, Dr.

The behavior of the serum glycoprotein level and the diphenylamine reaction in connection with inflammations in the small pelvis. Orv. hetil. 99 no.14;466-467 6 Apr 58.

1. A szegedi Orvostudomanyi Egyetem Szulezeteti es Nogyogyaszati Klinikajának (igazgató: Batizfalvy János dr. egyet. tanár) közleménye.

(BLOOD PROTEINS, in various dis.

female genital tuberc. & inflamm. of true pelvis, diag.  
significance of determ. of glyco- & mucoproteins by diphenylamine reaction (Hun))

(TUBERCULOSIS, FEMALE GENITAL, blood in  
glyco- & mucoproteins, determ. by diphenylamine reaction  
in differentiation of active & inactive states (Hun))

(PELVIS, dis.

inflamm. of true pelvis, diag. significance of determ. of  
blood glyco- & mucoproteins by diphenylamine reaction (Hun))

PIUKOVICH, Istvan, dr.; GABOR, Miklos, dr.; SZELL, Arpad, dr.

Changes in carbohydrates bound to serum proteins and the  
Middlebrook-Dubos test in genital tuberculosis. Tuberkulosis 13  
no.7:221-223 J1 '60.

1. A Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati  
Klinikajanak Kozlemenye  
(TUBERCULOSIS, UROGENITAL diag.)  
(GLYCOPROTEINS blood)  
(HEMAGGLUTINATION)

GABOR, Miklos

Data on the antagonism of anticoagulants and bioflavonoids.  
Kiserletes orvostud. 13 no.2:131 My '61.

1. Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati  
Klinikaja. (HEPARIN pharmacol.) (VITAMIN P pharmacol.)

GABOR, Miklos

Data on paper chromatography of bioflavonoids. Kiserletes orvostud.  
13 no.2:132 My '61.

1. Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati  
Klinikaja.  
(VITAMIN P chem.)

GABOR, Miklos

The hormonal effect of an isoflavone derivative (sophoricoside).  
Kiserletes orvostud. 13 no.2:133-134 May '61.

1. Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszeti  
Klinikaja.  
(UTERUS pharmacol.) (PLANTS extracts)

GABOR, Miklos; PIUKOVICH, Istvan; BARDOCZY, Arpad; SZABO, Laszlo

Experimental thrombocytosis produced by PAS-Cilag. Kiserletes orvostud.  
13 no.3:228-231 Je 461.

1. Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati  
Klinikaja.

(BLOOD PLATELETS pharmacol)  
(PARÄ-AMINOSALICYLIC ACID pharmacol)

BALASHSHA, R. [Balassa, R.] [deceased]; CABOR, M.

Transformation in nodule bacteria. Mikrobiologija 30 no.3:457-463  
My-Je '61. (MIRA 15:7)

1. Institut genetiki Vengerskoy AN Budapest.

(NUCLEIC ACIDS) (RHIZOBIACEAE)

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HUNGARY

GAJOR, Miklos; PIUKOVICH, Istvan; LACSAN, Ilona; Medical University of Szeged, Obstetrical and Gynecological Clinic (Szegedi Orvostudomanyi Egyetem Szülészeti és Nőgyógyászati Klinikaja)

"Experimental Thrombocytosis with o-Nitrophenol."

Budapest, Kiscerletes Orvostudomány, Vol XIV, No 6, 1962, pp 615-618.

Abstract: [Authors' summary] Summarizing their results the authors state that: 1/ 2,4-dinitrotoluol, nitrotoluol, m-nitrophenol, p-nitrophenol as well as 2,6-dinitrophenol have no influence on the number of thrombocytes in rats, 2/ o-nitrophenol, already in a dose of 1 mg per 100 g elevates the number of thrombocytes, while 5-10 mg per 100 g doses show significant elevation. The effect lasts 5-6 days. 3/ The thrombocyte number of normal rats can be elevated significantly by injecting them with sera obtained from rats treated with o-nitrophenol previously.

[5 Soviet-bloc, 12 Western references]

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GABOR, Miklos, dr.; MUKOVICH, Istvan, dr.; IHRACSKA, Antal, dr.; BARDOCZI, Arpad, dr.; SZELL, Arpad, dr.

Effect of paraaminosalicylic acid on the capillary resistance and on the number of thrombocytes in genital tuberculosis. Tuberkulosis 15 no.3:83-85 Mr '62.

1. A Szegedi Orvostudomanyi Egyesem Szuleszeti es Nogyogyaszati Klinika Janak (igazgato: Szontagh Ferenc dr. egyetemi tanar) kozlemenye.

(TUBERCULOSIS UROGENITAL ther)  
(PARAAMINOSALICYLIC ACID ther)  
(BLOOD PLATELETS pharmacol)  
(CAPILLARIES pharmacol)

GABOR, Miklos, dr.; KULKA, Frigyes, dr.

The diphenylamine test and the evaluation of the glycoprotein level  
in bronchial carcinoma. Tuberkulozis 16 no.2:56-58 F '63.

1. Z szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati  
Klinikajának (igazgató: Szontagh Ferenc dr. egyetemi tanár) es I.  
sz. Sebeszeti Klinikajának (igazgató: Petri Gábor dr. egyetemi tanár)  
közleménye.

(BLOOD CHEMICAL ANALYSIS) (CARCINOMA, BRONCHOGENIC)  
(GLYCOPROTEINS) (ANALINE COMPOUNDS)

GABOR, Miklos, dr.; PIUKOVICH, Istvan, dr.

Changes in serum neuraminic acid level in female genital tuberculosis. Tuberkulosis 16 no.4/5:129-131 Ap-Mu '63.

1. A Szegedi Orvostudomanyi Egyetem Szulezszei es Nogyogyassati klinikajának (igazgató: Szontagh Ferenc dr. egyetemi tanár) közössénye.

(TUBERCULOSIS, FEMALE GENITAL)  
(NEURAMINIC ACIDS)  
(BLOOD CHEMICAL ANALYSIS)  
(GLYCOPROTEINS)  
(BIPHENYL COMPOUNDS)

PIUKOVICH, Istvan; GABOR, Miklos, IHRACSKA, Antal; JAKOVITS, Antal

17-Ketosteroid excretion and the formation of protein-bound carbohydrates in inflammations of the small pelvis. Magy. noorv. lap. 26 no.2:123-126 Mr '63.

1. A Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati klinikajának közleménye (Igazgató: Szontagh Ferenc dr. egyetemi tanár).

(17- $\beta$ -ETOSTEROIDS) (ADNEXITIS) (TUBERCULOSIS, FEMALE GENITAL)  
(OVARY) (ABSCESS) (ABORTION, SEPTIC) (GLYCOPROTEINS)

GABOR, Miklos, dr.; PIUKOVICH, Istvan, dr.; SZEGVARY, Monyhert, dr.

Serum neuraminic acid levels in gynecological cancer patients.  
Magy onk. 8 no.1:29-31 Mr'64.

1. Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati  
Klinika.

SAS, Mihaly, dr.; GABOR, Miklos, dr.; KOVACS, Laszlo, dr.; NEMETH, Irén,  
dr.; SZONTAGH, Ferenc, dr.

Study of blood coagulation factors during gestagen treatment.  
Orv. hetil. 105 no.29:1353-1355 19 Jl '64

1. Szegedi Orvostudományi Egyetem, Női Klinika.

PIUKOVICH, Istvan; VARGA, Laszlo; GABOR, Miklos; TENYI, Maria; HORVATH, Endre;  
SIMON, Akosne

Formation of the serum protein-bound carbohydrate- and haptoglobin-  
level in experimental liver damage in rats. Kiserl. orvostud. 16 no.  
4:400-404 Ag '64.

1. Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati kli-  
nikaja, II sz. Belgyogyaszati Klinikaja es az Orszagos Verellato  
Szolgatalat Kozponti Kutato Intezet, Budapest.

PIUKOVICH, Istvan; STELL, Istvan; FULNES, Jocsef; JAKOBOVITS, Antal; LUDVIG, Andras; HUSZARI, Janos; GABOR, Miklos

Serum proteins, protein-bound carbohydrates and the Middlebrook-Dubos reaction in experimental tuberculosis of the uterine horn. Tuberkulozis 17 no.4:119-122 Ap '64.

1. A Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati Klinikajának (igazgató: Szontagh Ferenc dr. egyetemi tanár es Mikrobiológiai Intézeténak (igazgató: Ivanovics György dr. egyetemi tanár) közleménye.

L 10344-66

ACC NR: AF6003351

SOURCE CODE: HU/0018/65/017/002/0195/0196

AUTHOR: Gabor, Miklos; Matkovics, Bela—Matkovich, B.; Gondos, Gyorgy—Gendesh, D. <sup>18</sup>  
ORG: Obstetrical and Gynecological Clinic, Medical University of Szeged, Szeged <sup>B</sup>  
(Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati Klinikaja); Institute of  
Organic Chemistry, Jozsef Attila University, Szeged (Jozsef Attila Tudomanyegyetem  
Szerves Kemial Intezete)

TITLE: Data on the thin layer chromatography of bioflavonoids

SOURCE: Kiserletos Orvostudomany, v. 17, no. 2, 1965, 195-196

TOPIC TAGS: chromatography, biochemistry

ABSTRACT: The thin-layer chromatographic determination of hematoxylin, hematein and brasilin is described. The best suited solvent was found to be the upper phase of the butanol-acetic acid-water (4:1:5) system. The spots were fluorescent under an UV light and a 1.5 per cent aqueous uranyl acetate solution was used for their development. Orig. art. has: 1 figure and 1 table. [JPRS]

SUB CODE: 06 / SUBM DATE: 07Mar64 / ORIG REF: 001

Card 1/1

L 10343-66

ACC NR: AP6003352

AUTHOR: Gabor, Miklos

SOURCE CODE: HU/0018/65/017/002/0197/0199

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ORG: Obstetrical and Gynecological Clinic, Medical University of Szeged (Szegedi B  
Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati Klinikaja)

TITLE: Effect of synthetic isoflavone derivatives on the uterus of young mice

SOURCE: Kiserletes Orvostudomany, v. 17, no. 2, 1965, 197-199

TOPIC TAGS: mouse, drug effect, biochemistry

## ABSTRACT:

The estrogenic effect of some synthetic isoflavone derivatives has been studied on young mice by means of the weight measurement of the uterus. Of the (7,4'-dihydroxy-5,8-dimethoxy isoflavone, 7-hydroxy-5,8,2',4',5'-pentamethoxy isoflavone, 5,7,8,4'-tetrahydroxy isoflavone and 5,6,7-trimethoxy isoflavone) compounds used, the tetrahydroxy derivative was found to be the most effective. The author thanks Jozsef Varady placing the isoflavone derivatives at his disposal. Orig. art. has: 2 figures and 1 table. JPRS

SUB CODE: 06 / SUBM DATE: 07May64 / ORIG REF: 001 / OTH REF: 009

Card 1/1

GABOR, Miklos; MAGYARLAKI, Anna

Relations between the surface tension of flavonoids and  
their pharmacologic action. Acta pharm. Hung. 35 no.6:  
284-288 N '65.

1. Submitted June 14, 1965.

L 15511-66

ACC NR: AT6007476

SOURCE CODE: HU/2505/65/026/00X/0066/0066

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B+

AUTHOR: Madacsy, L.; Szorady, I.; Gabor, M.

ORG: Department of Pediatrics, Department of Gynecology, Medical University of Szeged, Szeged (Szegedi Orvostudomanyi Egyesem, Gyermekgyogyaszati Tanszék és Nogyogyaszati Tanszék)

TITLE: Influence of pantothenic acid on capillary resistance. This paper was presented at the 29th Meeting of the Hungarian Physiological Society held in Szeged from 2 to 4 July 1964.

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 26, Supplement, 1965, 66

TOPIC TAGS: rat, blood circulation, <sup>55</sup>physiology, man, vitamin

ABSTRACT:

The first part of the experiments was carried out on the shaven back of rats of either sex. Capillary resistance was determined by means of BORBELY's apparatus. In response to suction at a negative pressure of 250 mm Hg for one minute, petechiae appeared. Following the determination of the CR value, the rats were treated

Card 1/2

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L 15511-66

ACC NR: AT5007476

with pantothenic acid (5 mg/kg, intraperitoneally). Capillary resistance was again determined 3-6 hours after this treatment. The study was considered to be completed when no petechiae appeared after a period of 5 minutes. A significant increase in capillary resistance was achieved in 19 of the 23 animals so treated and no petechiae were visible after 5 minutes. Slight elevations in CR were noted in the other 4 rats as well. In the second part of the experiments, the persistence of the effect was studied in 18 rats. The effect was prolonged in 11 of the animals, present even on the fifth day following the administration of pantothenic acid. Another three animals had a slightly protracted effect. Tests made on 16 small children have likewise shown that pantothenic acid increases CR. [OPRS]

SUB CODE: 06 / SUBM DATE: none

Card 2/2

HUNGARY

GAVOR, MIKLOS, EPERJESSY, Eva; Medical University of Szeged, Institute of Pharmacodynamics (Szegedi Orvostudomanyi Egyetem, Gyogyszerhastastani Intezet).

"The Antibacterial Effect of Bioflavonoids. Experiments With Fisetin and Fisetidine."

Budapest, Kiserletes Orvostudomany, Vol XVIII, No 2, Apr 66, pages 203-207.

Abstract: [Authors' Hungarian summary] The antibacterial effect of some compounds belonging into the flavonoid group, fisetin, dihydrofisetin, fisetidine and dihydroquercetin were studied. According to the results, dihydrofisetin and dihydroquercetin were ineffective, even in high concentrations, against all the strains tested. Fisetin and fisetidine, on the other hand, have a bacteriostatic and bactericidal effect, in high dilutions, on the growth of *St. albus* *resistans* and *St. aureus* (Buttle). According to the study, fisetin and fisetidine belong among the most highly effective antibacterial bioflavonoids known today. 3 Hungarian, 14 Western references. [Manuscript received 18 Jun 65.]

(2)

HUNGARY

VARGA, László, Dr., PIUKOVICH, István, Dr., ZOLTAN, O. Tamás, Dr., GYIOR, Miklós, Dr., and FÜLDI, Mihály, Dr., Second Clinic for Internal Medicine (II. Belklinika)(Director: FÜLDI, Mihály) and Clinic for Obstetrics and Gynecology (Szüleaszeti és Nogyogyászati Klinika)(Director: SZONTAGH, Ferenc, Dr.) at the Medical University (Orvostudományi Egyetem) in Szeged.

"Investigation of the Concentration of Carbohydrate Bound with Serum and Lymph-Proteins in Experimental Inflammations"

Budapest, Orvosi Hetilap, Vol 107, No 24, 26 Jun 1966, pp 1203-1206.

Abstract: The protein-sugar level and the concentration of carbohydrate bound with the protein of the ductus thoracicus showed an increase in animals experimentally infected to turpentine inflammation. On the other hand, the glycoprotein content in the truncus cervicalis from the inflamed area was significantly lower, even after 24 or 48 hours, than in the serum or in the ductus thoracicus. It was assumed that the organism retains glycoproteins in the inflamed areas for use in the regeneration processes. 28 references, including 2 German, 1 Hungarian, and 25 Western.

1/1

GABOR, M.

Vitamin P-like action of hematoxylin and structurally related dyes in  
reduction of permeability. Acta physiol. hung. 2 no.3-4:505-509 1951.  
(CLML 22:1)

1. Of the Institute of Pharmacology of Szeged University.

GABOR, L.

GABOR, L.

"Some Problems in Connection With Manufacturing Articles of Prime Necessity", P. 13, (TOPBTELEK, Vol. 8, No. 6, June 1954, Budapest, Hungary)

SO: Monthly List of East European Assess'ons, (EAL), LC, Vol. 4, No. 1, Jan. 1955, Uncl.

MOSONYI, M.; GABOR, P.

Primary cancer of the fallopian tube. Magy. Moory. lap. 14 no. 9:283-  
286 Sept 1951. (CLML 21:2)

1. Doctors. 2. Institute of Pathology and Pathohistology (Director --  
Prof. Dr. Bela Korpassy) and Obstetric-Gynecological Clinic (Director  
-- Prof. Dr. Janos Batizfalvy), both of Szeged Medical University.

GABOR, P.;SZEGVARI, M.

Demonstration of cancer cells in the vaginal smear. Orv. hetil.  
93 no. 6:194-195 10 Feb 1952. (GIML 23:3)

1. Doctors. 2. Obstetric and Gynecological Clinic (Director -- Prof. Dr. Janos Batifalvy) and Institute of Pathological Anatomy and Pathological Histology (Director -- Prof. Dr. Bela Korpasay), Szeged Medical University.

GABOR, P.

Secondary bladder endometriosis. Magy. noorv. lap. 16 no. 1-2:57-59  
Jan 1953. (CIML 24:1)

1. Doctor. 2. Obstetric and Gynecological Clinic (Director -- Prof.  
Dr. Janos Batizfalvy), Szeged Medical University.

KLINGHOFER, L.; GABOR, P.

Surgical arteriovenous fistula in the therapy of hypertension. Orv.  
hetil. 94 no.28:776-777 12 July 1953. (CLML 25:1)

1. Doctors. 2. Second Internal Clinic (Director -- Prof. Dr. Gabor  
Csoniczer) and Institute of Surgical Anatomy and Surgery (Director --  
Prof. Dr. Gabor Petri) of Szeged Medical University.

GABOR, Pal, dr.; BUKOVINSKY, Lasslo, dr.

Simultaneous occurrence of genital tuberculosis and cervical cancer. Magy. orvov. lap. 17 no.3:176-179 May 54.

1. A Szegedi Orvostudomany-Egyetem Szuleszeti es Nogydogyaszati Klinikajának közleménye (igazgató: Batizfalvy János dr. egyetemi tanár.)

(CERVIX, UTERINE, neoplasms,  
with genital tuberc.)

(TUBERCULOSIS, FEMALE GENITAL, complications,  
cancer of cervix)

GABOR, Pal dr.

No translation. Magy.noorv.lap.17 no.5:304-307 Sept 54.

1. A szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati Klinikajának közleménye (Igazgató: Batizfalvy János dr. egyetemi tanár).

(UTERUS, neoplasms (Hun)

hemangioma (Hun)

(ANGIOMA,

uterus (Hun)

GABOR, Pal, dr.; JAKOBOVITS, Antal, dr.

Pathological and clinical data on endometriosis. Magy.noorv.lap.  
18 no.1:48-53 Jan 55.

1. A Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati  
Klinikajának (Igazgató: Batizfalvy János dr. egyetemi tanár) es  
Korbonctani es Korszovettani Intézetének (Igazgató: Korpássy Béla  
dr. egyetemi tanár) Kozlemenye.  
(ENDOMETRIOSIS, pathol.  
clin. & histopathol. (Hun)

Gabor P.

HUNGARY/Excretory System.

S-4

Abstr Jour : Rof Zhur - Biol., No 5, 1958, No 21789

Author : Gabor, P., Piukovich, I.

Inst : Not Given

Title : On the Origin of "Antepartum" Cells. (Reaction of Uropoietic Epithelium to Hormones).

Orig Pub : Magyar noorv. lapja, 1955, 18, No 2, 121-127.

Abstract : The exfoliated cells of the surface epithelium of uropoietic system in the stillborn females corresponded to "antepartum" cells in the mother's urine. It is believed that abundant exfoliation of the epithelium was caused by simultaneous secretions of progesterone, gonadotropic hormone and the folliculin.

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GABOR, Pal, dr.; BALO, Lajos, dr.

Cytologic and bioptic methods in early diagnosis of cervical cancer. Orv. hetil. 96 no.26:725-726 26 June 55

1. A Szegedi Orvostudomanyi Egyetem Szulesszeti es Nogyogyasszati (Igazgato: Batisfalvy Janos dr. egyetemi tanar) kozlemenye.  
(CERVIX, UTERINE, neoplasms,  
diag., cytol.)

EDITION 5 Vol. 10/6 Pathology June 57

1660. GÁBOR P. and BARTÓK I. Frauenklin. und Pathol. Inst., Med. Univ., Szeged.  
Intrauterine Pneumonie als Todesursache beim Fetus. Intrauterine  
pneumonia causing death of the foetus ZBL. ALLG. PATH.

PATH ANAT. 1956, 95/5-6 (217-220) Illus. 2

A full time newly born infant boy (weight 2650 g., body length 48 cm.) was born in  
a state of asphyxia and could not be revived. Macro- and microscopic examinations  
revealed an acute diffuse catarrhal bronchopneumonia, severe purulent bronchitis  
and broncholitis. No doubt the infection occurred in utero, as the mother, at the  
termination of pregnancy had been feverish with evidence of an infection.

Karlinska - Warsaw (V,7,10\*)

GABOR, Pal; BARTOK, Istvan

Intra-uterine pneumonia causing death of fetus. Gyermekgyogyaszat  
8 no.3-4:112-115 Mar-Apr 57.

1. A Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati  
Klinikajának (igazgató: Batisfalvy, János dr. egyet. tanár) es  
Koronctani es Korszovettani Intézetek (igazgató: Korpássy, Béla,  
dr. Egyet. tanár) közleménye.

(FETUS, dis.

intra-uterine pneumonia causing stillbirth (Hun))

(STILLBIRTH

caused by intra-uterine pneumonia of fetus (Hun))

(PNEUMONIA

intra-uterine pneumonia of fetus causing stillbirth (Hun))

GABOR, Pal, Dr.; TRAUB, Alfred, Dr.

Giant uterine cyst and peduncular torsion of myoma. Orv. hetil. 99  
no.36:1262-1263 7 Sept 58.

1. A Szegedi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati  
Klinikajának (igazgató: Batizfalvy János dr. egyet tanár) kozleménye.

(UTERUS NEOPLASMS, case reports

peduncular torsion of leiomyoma causing develop. of  
giant cystic fibromyoma (Hun))

(LEIOMYOMA, case reports

uterus, peduncular torsion of leiomyoma causing develop.  
of giant cystic fibromyoma (Hun))

GABOR, Pal, dr.

Thrombosis during the final stage of pregnancy and during labor.  
Orv. hetil. 101 no.35:1254-1255 28 Ag '60.

1. Szegedi Orvostudomanyi Egyetem, Szülészeti és Nogyogyaszati  
Klinika.

(THROMBOSIS in pregn)  
(PREGNANCY compl)  
(LABOR compl)

GABOR, Pal

Libraries in the drawer of desk. Elet tud 17 no. 7:195-199 F '62.

GABOR, Peter, okleveles gépész mérnök

The new four-axle motorcar of the Budapest Electric Railway.  
Elektrotechnika 51 no.7/9:348-355 '58.

1. Klement Géttwald Villamossági Gyár.

GABOR, Peter, adjunktus

On some problems of breakdown voltage of rod spark gaps.  
Elektrotechnika 52 no.3:97-104 '59.

1. Budapesti Műszaki Egyetem Villamosművek Tanszéke.

GABOR, Peter

Jubilee of the Cogwheel Railroad Line of the Liberty Mountain.  
Elektrotechnika 52 no.8/9:392-393 '59.

GABOR, Peter

"Electric traction on lines of the German Federal Railways  
in 1958" by W. Klusche. Reviewed by Peter Gabor, Elektrotechnika  
53 no.1:41-43 '60.

...ici, ...

Dissertation: "Experimental Data on the Toxicology of Ethyl Esters of Acrylic Acid."  
Seri Med Ici, Leningrad Sanitary-Hygiene Medical Inst, Leningrad, 1954. Referativnyy  
Zhurnal--Khimiya, Moscow, No 8, Apr 54.

SO: SUM 284, 26 Nov 1954

### Table 1

RUMANIA/Chemical Technology, Chemical Products and Their Application, Part 1. - Safety and Sanitation Techniques.

H-6

Abs Jour: Referat. Zhurnal Khimiya, No 10, 1958, 33018.

Author : S. Gabor, Ch. Nadudvary, S. Baitan.

Inst : Not given

**Title : Efficiency of Measures for Decreasing Dust Concentration in Factories of Refractory Materials.**

Orig Pub: Igienia, 1957, 6, No 3, 259-265.

**Abstract:** The old technological process of refractory material production by treating the components dry, at which treatment the dust concentration in work premises exceeds the permissible 10 and more times, is described. After the introduction of the process with wet treatment of

Card : 1/2

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000513920015-5"

RUMANIA/Chemical Technology, Chemical Products and Their  
Application, Part 1. - Safety and Sanitation  
Techniques.

H-6

Abs Jour: Referat, Zhurnal Khimiya, No 10, 1958, 33018.

ingredients (crushing, transportation, pressing etc.)  
the dust concentration drops to the permissible.

Card : 2/2

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000513920015-5

GABRAKOV, Stefan

Spherical thunderbolt. Fiz mat spisanie BAN 6 no.1:42-51 '63.

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000513920015-5"

GABRAKOV, St.

Some new results respecting the structure of atomic  
nucleus. Priroda Bulg 12 no. 1: 27-29 Ja-F '63.

GABOR, Sylvia; RAUCHER, K.

Studies on the determination of maximum concentrations of benzene and monochlorobenzene. J.hyg.epidem., Praha 4 no.2:223-231 '60.

1. Institut fur Hygiene and Gesundheitsschutz, Abteilung Arbeits-hygiene, Cluj.  
(INDUSTRIAL MEDICINE)  
(BENZENE toxicol)

*Gabor, Silvia*

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(60)

Bucharest, Science, Vol XI, No 1, Jan-Feb 1962

1. "Occupational Cancer of the Intestine Caused by the Culture and its Derivatives", Prof P. MANU; pp 1-11.
2. "Pollution of the Atmosphere in the Vicinity of an Electrical Transformer Station", M. ZAMFIRESCU, M. ZVORCĂ-SALINĂ, Dr. V. RĂDĂU, Dr. M. LĂZĂRESCU, I. ENACHE, R. MIRILOIU and Dr. D. DĂDĂRESCU; pp 17-19.
3. "Notes on the Supply of Drinking Water in Rural Areas by Means of Small Central Supply Units (Microcosm Project)", Dr. T. STOILIU and Dr. Mihai MĂRĂSCU; pp 19-25.
4. "Experimental Investigations on the Toxicity of Certain Chemical Substances Used in the Manufacture of Orange Oils", (Festivităș), Silvia GĂRDEA, Dr. C. BĂDĂRESCU, Mine IELCA and Petru-Emil BĂDĂRESCU, have performed at the I.R.N. Institute of Hygiene and Public Health (Institutional Research of Sanitary Public Health), Cluj Branch (Pellești Cluj); pp 27-30.
5. "Investigations Concerning Influences of Ionizing Radiations on the Fatty Acids of Proteins and Lipids in Canned Pork", Dr. A. MĂRĂSCU, Dr. S. RĂDĂU, Dr. Iuliană GĂRDEA, (Festivităș), have performed at the I.R.N. Institute of Hygiene and Public Health (Institutional Research of Sanitary Public Health), Bucharest; pp 31-39.
6. "New Aspects Regarding the Use of Chlorinated Weeds as Sanitary Indicators for Food Products", Ștefan-Ioan IONESCU; pp 41-48.
7. "The Use of Plant Roots in Food Testing by "Răducaș" (Răducașul), Dr. A. STĂnescu and Silvia GĂRDEA, I.R.N. Institute of Hygiene and Public Health (Institutional Research of Sanitary Public Health), Bucharest; pp 49-53.
8. "A Few Observations on the Collimator", Dr. H. ZĂRĂU and Dr. Radu-Emil DĂRĂU; pp 55-60.
9. "Radioactive Pollution of Natural Water Reservoirs", Dr. Ghe. ZĂRĂU; pp 61-65.

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✓ Application of complex borohydrides in organic syntheses.

János Kolonitsch, Oskar Fuchs, Valéria Gábor, and Jenő

Gallaiay (Györgykezírészeti Kutató Intézet, Budapest).

Végjártó Kataló Tárlatok Kötetbenyes 4, 147-152 (1964).—

It was observed that LiBH<sub>4</sub> is stable at low temp. (3-4 hrs.

at 10°). Its EtOH soln. was prep'd. by cooling with an ice-

salt mixt. separate solns. of NaBH<sub>4</sub> and LiCl in EtOH, mix-

ing the two solns., and filtering off the NaCl. This soln. was

found suitable for reducing ketones and aldehydes, including

steroid ketones. New complex borohydrides such as Mg-

(BH<sub>4</sub>)<sub>2</sub> (from MgMe<sub>2</sub> and diborane in abs. ether) and Ca-

(BH<sub>4</sub>)<sub>2</sub> were also prep'd. in a similar manner. They were

found suitable for the selective reduction of various compds.,

both org. and inorg. They are cheap and relatively easy to

prepare. Na methoxyborohydride (cf. Brown, *et al.*, *C.A.*

47, 37416) was found suitable for the selective reduction of

aldehydes, ketones, and acid chlorides. G. J. Ernay

Distr: 4E4j/4E3d/4E2c(j)

*JW* *JG*

Gabor, V.

✓Chloramphenicol series. I. A new synthesis of chloramphenicol. János Kollonitsch, A. Hajtai, V. Gábor, and M. Kálmán (Research Inst. Pharm. Ind., Budapest); *Acta Chim. Acad. Sci. Hung.* 3, 13-32 (1954) (in German); English summary).—A new method is reported for the PbO-catalyzed addn. of alkyl hypobromites to double bond. To a suspension of 12 g. PbO in 100 ml. MeOH is added, alternately and in small portions, 5.2 ml. Br and a soln. of 14.8 g. PhCH<sub>2</sub>CH<sub>2</sub>H in 250 ml. MeOH, the mixt. cooled, stirred 1.5 hrs., and filtered. Removal of Pb salts with H<sub>2</sub>S and concn. in vacuum gives 24.0 g. *erythro*-2-bromo-3-phenyl-3-methoxypropanoic acid (I), m. 170-83°. A suspension of 24 g. PbO in 200 ml. MeOH treated similarly with 10.4 ml. Br and with a soln. of 32.4 g. PhCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>Me gives, after removal of Pb salts and vacuum concn., 41 g. *Me erythro*-2-bromo-3-phenyl-3-methoxypropanoate (II), m. 74-6°. Heating 82 g. *threo*-MeOCH<sub>2</sub>PhCH<sub>2</sub>CO<sub>2</sub>H in a sealed tube at 80° for 12 hrs. with 800 ml. concd. NaOH gives 42.18 g. *threo*-2-amino-3-phenyl-3-methoxypropanoic acid (III), m. 228-30° (from ale.). Heating 20 g. I with 170 ml. concd. NH<sub>3</sub>/H<sub>2</sub> for 18 hrs. at 80° in a sealed tube gives 17.45 g. *erythro*-2-amino-3-phenyl-3-methoxypropanoic acid (IV), m. 218-10° (from ale.). Heating 78.8 g. IV with 78.6 g. *o*-C<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H 15 min. at 160° gives 78 g. *erythro*-2-phthalimido-3-phenyl-3-methoxypropanoic acid (V), m. 200-3° (from ale.). Heating 78 g. V with 70 g. PCl<sub>5</sub> in 800 ml. abs. C<sub>6</sub>H<sub>6</sub> gives 73.0 g. *erythro*-2-phthalimido-3-phenyl-3-methoxypropanoyl chloride (VI), m. 195-6° (decompn.). Heating 4 g. VI with 5 ml. abs. pyridine and MeSH [from 20 g. MeSCl; NH<sub>3</sub>NH<sub>2</sub>, and 30 ml. 5N NaOH] in a sealed tube gives 2.68 g. *erythro*-2-phthalimido-3-phenyl-3-methoxypropanoic acid methylketone ester (VII), m. 147-6°.

(from ale.). Heating a soln. of 0.45 g. VII in 50 ml. abs. C<sub>6</sub>H<sub>6</sub>O<sub>2</sub>N (VIII), m. 165-70° (from ale.). To a suspension of 19.45 g. Pd-BaSO<sub>4</sub> in 400 ml. xylene is added 23.9 g. VI and 0.08 g. NH<sub>3</sub>CSNH<sub>2</sub> and the mixt. treated with II at 150°, giving *erythro*-2-phthalimido-3-phenyl-3-methoxypropanaldehyde (IX), m. 140-42°; *p*-nitrophenylhydrazone (X), m. 202-4°. A soln. of 25 g. IX in 250 ml. iso-PrOH heated with 13.1 g. Al(iso-PrO)<sub>3</sub> gives 20.18 g. *erythro*-2-phenyl-1-methoxy-2-phthalimido-3-hydroxypropane (XI), white crystals, m. 101.8° (from Et<sub>2</sub>O). A soln. of 5 g. XI in 20 ml. abs. ale. treated with 30 cc. N ale. soln. N<sub>2</sub>H<sub>4</sub>H<sub>2</sub>O gives 2.0 g. *erythro*-1-phenyl-1-methoxy-2-amino-3-hydroxypropane (XII), green oil; *p*-nitrobenzene(tride, isofa), m. 105-4°. Refluxing 3.35 g. IV with 80 ml. abs. ale. gives 4 g. *Et erythro*-2-amino-3-phenyl-3-methoxypropanoate-HCl (XIII), m. 168° (decompn.). A soln. of 2.03 g. XIII in 7 ml. MeOH treated with a soln. of 0.23 g. Na in 5 ml. MeOH gives 2.31 g. *Et erythro*-2-amino-3-phenyl-3-methoxypropanoate (XIV), as an oil. A soln. of 0.3 g. XIV in 100 ml. dry Et<sub>2</sub>O treated with 1.57 g. LiAlH<sub>4</sub> in 57 ml. dry Et<sub>2</sub>O gives 5.85 g. *erythro*-1-phenyl-1-methoxy-2-amino-3-hydroxypropane (XV) as an oil. A soln. of 0.2 g. XV in 10 ml. H<sub>2</sub>O treated with 0.22 g. *p*-C<sub>6</sub>N<sub>5</sub>H<sub>4</sub>COCl in 10 ml. dry Et<sub>2</sub>O and 4 ml. N NaOH gives 0.13 g. product which recrystd. from 60% ale. gives 0.09 g. *N*-*p*-nitrobenzoyl deriv. of XV, m. 103-4°. Heating 0.84 g. XV with 5 ml. 50% HBr gives 1.13 g. of oil *threo*-1-phenyl-2-amino-1,3-dihydroxypropane (XVI). A soln. of 0.2 g. of XVI in 6 ml. H<sub>2</sub>O treated with a soln. of 0.11 g. *p*-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>COCl in 10 ml. Et<sub>2</sub>O and with 4 ml. N NaOH gives 0.05 g. *N*-*p*-nitrobenzoyl deriv. of XVI, m. and solvatin, p. 194° (from ale.). A soln. of 11.3 g. XI in 20 ml. abs. pyridine treated with II

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ml.  $\text{Ac}_2\text{O}$  gives 12.6 g. (100%) **XI acetate** (**XVII**), m. 107-10°. Treatment of 32.6 ml. concd.  $\text{HNO}_3$  (decolorized with  $\text{NH}_4\text{SO}_3\text{H}$ ) with 12.01 g. **XVII**, added in small portions, gives 5.19 g. *erythro*-1-*p*-nitrophenyl-1-methoxy-3-phthalimido-3-acetoxypropane (**XVIII**), m. 143-4° (from abt. alc.). Heating 1.4 g. **XVIII** 12 hrs. with 28 ml. 6*N* HCl gives 0.94 g. *erythro*-1-*p*-nitrophenyl-1-methoxy-2-amino-3-hydroxypropane (**XII**), rose-red crystals, m. 110° (from  $\text{C}_6\text{H}_6$ ). Treatment of 0.2 g. **XIX** with 2 ml. 56% HBr and 5 ml.  $\text{H}_2\text{O}$  followed by evn., with  $\text{EtOAc}$  and treatment of the ext. with 1 ml.  $\text{Ac}_2\text{O}$  and 1 ml. pyridine gives 0.11 g. *erythro*-1-*p*-nitrophenyl-2-acetamido-1,3-dihydroxypropane diacetate (**XX**), m. and mixed m.p. 154-8° (from  $\text{Et}_2\text{O}$ ). Refluxing 120° ml. of satd. alc. HCl with 47.87 g. **III** and continued addn. of HCl gas gives 40.25 g. *Et* *threo*-2-amino-3-phenyl-3-methoxypropanoate *HCl* (**XII**), m. 183-4°. A soln. of 40.25 g. **XII** in 150 ml. abs.  $\text{MeOH}$  treated with a soln. of 3.86 g. Na in 80 ml.  $\text{MeOH}$  gives 32 g. *Et* *threo*-3-amino-3-phenyl-3-methoxypropanoate (**XXII**). A soln. of 32 g. **XII** in 100 cc. abs.  $\text{Et}_2\text{O}$  treated with 8 g.  $\text{LiAlH}_4$  in 300 ml. abs.  $\text{Et}_2\text{O}$  gives 25.70  $\mu$ l. *threo*-1-phenyl-1-methoxy-2-amino-3-hydroxypropane (**XXII**) as an oil; *N*-*p*-nitrobenzoyl deriv., m. 170-81°. Treatment of 0.08 g. **XXII** with 0.8 ml. 50% aq. HBr followed by 0.03 g.  $\text{J}-\text{O}_2\text{NC}_6\text{H}_4\text{COCl}$  gives 0.02 g. "i*threo*-1-phenyl-2-amino-1,3-dihydroxypropane *bis*-*p*-nitrobenzoate" (**XXIV**), m. and mixed m.p. 190-8°. A soln. of 19.39 g. **XXIII** in 35 ml. abs. pyridine treated with 90 ml.  $\text{Ac}_2\text{O}$  gives 23.88 g. *threo*-1-phenyl-1-methoxy-3-acetamido-3-acetoxypropane (**XXV**), m. 122-3°. To a mixt. of 4.8 ml. concd.  $\text{HNO}_3$  and 40 ml. concd.  $\text{H}_2\text{SO}_4$  at -10° is added a soln. of 23.88 g. **XXV** in 75 ml.  $\text{CHCl}_3$ , giving 30.69 g. of oil which heated 2 hrs. with 280 ml. 5% HCl, extd. with  $\text{CHCl}_3$ , the

solvent removed, and the residue treated with 10.1 g. *Et*-methoxy-2-amino-3-hydroxypropane (**XXVI**), m. 94-7° (from abt. alc.). Treating 12.5 g. **XXVI** with 76 ml. *N* NaOH gives 0.62 g. of the free base (**XXVII**), m. 82-4° (from  $\text{H}_2\text{O}$ ). Heating 0.52 g. **XXVII** with 5.2 ml. 54% HBr gives, on addn. of 10*N*  $\text{NaOH}$ , a good yield of *threo*-1-*p*-nitrophenyl-2-amino-1,3-dihydroxypropane (**XXVIII**), m. and mixed m.p. 141-2°. Heating 2.03 g. **XII** with 11 ml. 54% HBr and boiling the resulting hydrobromide with 60 ml.  $\text{H}_2\text{O}$  gives 1.12 g. of the demethylated base. A soln. of 0.69 g. of this base in 3 ml. abs. alc. treated with 0.46 g.  $\text{BzOH}$  gives 0.35 g. of mixed salts. Recrystn. of 0.3 g. of this product from 10 ml. abs. alc. gives 0.09 g. of **XVI** benzoic acid salt, m. 150-61°, and 0.14 g. of *erythro*-1-phenyl-2-amino-1,3-dihydroxypropane (**XXIX**) benzoic acid salt, m. 206-8°. Heating **XXVIII** or *erythro*-1-*p*-nitrophenyl-2-amino-1,3-dihydroxypropane (**XXX**) with HBr produces no change in configuration. Heating 0.5 g. **XXIX**-*HCl* with 5 ml. concd. HCl in a sealed tube at 100° gives 0.37 g. of oil which, dissolved in 1 ml. abs. alc. and treated with 0.27 g.  $\text{BzOH}$ , gives 0.39 g. of **XVI** benzoic acid salt, m. 162-3°. Heating **XVI** with HBr produces no change in configuration. A soln. of 1.4 g. *threo*-1-phenyl-1-hydroxy-3-acetamido-3-acetoxypropane (**XXI**) in 70 ml. dry  $\text{Me}_2\text{CO}$  treated with 14 g.  $\text{Ag}_2\text{O}$  and 14 ml.  $\text{MeI}$  gives, when the process is repeated, 0.35 g. **XXV**, m. 118-20°, b.p. 140-50°. Bolling 4.62 g. **XXVII** with 7.52 g.  $\text{D}(\text{CH}(\text{OMe})_2\text{CO}_2\text{H})_2$  in 20 ml. abs. alc. gives, on fractional cryst. from abs. alc. 2.4 g.  $\text{(+)}\text{-threo}$ -1-*p*-nitrophenyl-1-methoxy-3-amino-3-hydroxypropane dibenzoyl-d-lactate,  $\text{C}_{24}\text{H}_{28}\text{N}_2\text{O}_6$  (**XXXI**), m. 194-6°,  $[\alpha]_D^{25} -44^\circ$  (1% soln. in 50% alc.). A soln. of 2.25 g. **XXVII**

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in 20 ml. H<sub>2</sub>O treated with 8 ml. 2*N* NaOH gives 0.73 g. 1(+)-*threo*-1-*p*-nitrophenyl-1-methoxy-2-amino-3-hydroxypropane (XXXIII), m. 99° (from C<sub>6</sub>H<sub>6</sub>), [α]<sub>D</sub> 68 (1% soln. in *N* HCl). In a similar manner 1(-)-*threo*-1-*p*-nitrophenyl-1-methoxy-2-amino-3-hydroxypropane (XXXV) is prep'd., m. 108-7° (from C<sub>6</sub>H<sub>6</sub> and H<sub>2</sub>O), [α]<sub>D</sub> -74 (1% soln. *N* HCl). Heating 0.49 g. XXXIV with 5 ml. 53.5% HBr for 1 hr. followed by addn. of 10 ml. H<sub>2</sub>O and further heating under N gives 0.06 g. 1(-)-*threo*-1-*p*-nitrophenyl-2-amino-1,3-dihydroxypropane (XXXV), m. and mixed m.p. 104-5° [α]<sub>D</sub> -22° (2% soln., *N* HCl). Heating 0.6 g. XXXIII with 6 ml. 50% HBr followed by addn. of 12 ml. H<sub>2</sub>O and further heating under N gives 0.07 g. 1(+)-*threo*-1-*p*-nitrophenyl-2-amino-1,3-dihydroxypropane (XXXVI), m. and mixed m.p. 103-5° (from H<sub>2</sub>O), [α]<sub>D</sub> 29° (2% soln., *N* HCl). Heating a soln. of 2.12 g. XXXV in 10 ml. abs. dioxane with 1.30 ml. Cl<sub>2</sub>COCHCl<sub>2</sub> gives good yield of chloramphenicol, m. and mixed m.p. 151-2°, [α]<sub>D</sub> 19° (4.9% soln., a.c.).

Henry B. Haste

Ch 11 New syntheses of chloramphenicol and its stereochemical relationships. I. Kollonitsch, A. Haifa, V. Gábor, and M. Kraut (Forschungsinst. pharm. Ind., Badische Anilin-und Soda-Fabrik AG, Ludwigshafen (Rhine), Germany 6700, 458-8 (1954) (in German); cf. preceding note. The *threo* form of  $\beta$ -phenylserinol 3-Me ether (I) (*N*- $p$ -nitrobenzoyl deriv., m. 170-81°) was obtained by LiAlH<sub>4</sub> reduction of the *Rt* ester of the diastereoisomer of  $\beta$ -phenylserine Me ether (II) with the lower m.p. and by reduction of the phthalyl deriv. of II to 3-phenyl-3-methoxy-2-phthalimidopropionaldehyde, followed by reduction with (iso-PrO)<sub>2</sub>Al and dephthalylation with N<sub>2</sub>H<sub>4</sub>. From the *O,N*-di-Ac deriv. of I was derived  $\beta$ - $p$ -nitrophenylserinol 3-Me ether (III), m. 82-4°, which was demethylated to *threo*-1-( $p$ -nitrophenyl)-2-amino-1,3-dihydroxypropane (IV). Treatment of III with tartaric acid or dibenzoyltartaric acid produced the optical antipodes. The *I*-isomer of III, m. 103-7°, [ $\alpha$ ]<sub>D</sub> -74° (1% in N HCl), was converted by demethylation to a compd. (V) apparently identical with the hydrolyzate of natural chloramphenicol (VI). Treatment of V with CH<sub>2</sub>Cl<sub>2</sub>COCCl<sub>3</sub> gave a good yield of VI. The diastereoisomer of II with the higher m.p. was similarly reduced to obtain *erythro*- $\beta$ -phenylserinol 3-Me ether (VII) (*N*- $p$ -nitrobenzoyl deriv., m. 103-4°), which was converted to *erythro*- $\beta$ - $p$ -nitrophenylserinol 3-Me ether, m. 110-11°. Demethylation of VII with aq. HBr resulted primarily in *erythro*- $\beta$ -phenylserinol (VIII), with some *threo*- $\beta$ -phenylserinol (IX). It was found that the conversion of

VIII to IX could be effected under the conditions of methylation, however IX, *erythro*- $\beta$ - $p$ -nitrophenylserinol (*threo*- $\beta$ - $p$ -nitrophenylserinol (X) m. 103-4°) under these conditions. *trans*-Cinnamyl alc. Me ether was in EtOH with Br in the presence of PbO, yielding 1- $p$ -bromo-1,3-dimethoxypropane (XI), which was reduced by ammonolysis to  $\beta$ -phenylserinol di-Me ether (XII) (*threo*- $\beta$ -benzoyl deriv., m. 129-30°). The *N*-Ac deriv. (XIII) was identical with the compd. obtained from the *N*-Ac of *threo*- $\beta$ -phenylserinol by methylation with MeI and NaH. XIII was nitrated, deacetylated, and deaminated to give X. From the results it is evident that ammonolysis of 3-phenyl-3-methoxy-2-bromopropionic acid (XIV) to X gives diastereoisomeric amino derivs. although XI and X<sub>Y</sub> probably have the same configuration. It is suggested that this apparent contradiction can be explained by the "neighboring group effect." D. S. Farmer

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GHEORGHE V.

## HUNGARY

Racemization of  $\left( \begin{array}{c} \text{CH}_3 \\ | \\ \text{C}_6\text{H}_4 \\ | \\ \text{CH}_3 \end{array} \right)$  (I) (a three-carbon-1,2-nitrophenyl propanediol diacid) (J. Kollmitzsch, A. H. K. and V. Csabai, Research Inst. Maros-Torda, Budapest). *Chemistry & Industry* 1935, 58-60. In  $\left( \begin{array}{c} \text{CH}_3 \\ | \\ \text{C}_6\text{H}_4 \\ | \\ \text{CH}_3 \end{array} \right)$  (I)  $\text{NaO}-\text{p-NO}_2\text{C}_6\text{H}_4\text{CH}(\text{OH})-\text{CH}(\text{OH})\text{C}_6\text{H}_4\text{CO}_2\text{Na}$  with  $\text{AcCl}$  gives  $\text{p-O}_2\text{NC}_6\text{H}_4\text{CH}(\text{Ac})\text{CH}(\text{OH})\text{C}_6\text{H}_4\text{CO}_2\text{Na}$  with  $\text{AcCl}$  gives  $\text{p-O}_2\text{NC}_6\text{H}_4\text{CH}(\text{Ac})\text{CH}(\text{OH})\text{C}_6\text{H}_4\text{CO}_2\text{Na}$  with  $\text{NaCO}_2$  rearranges it to  $\text{p-O}_2\text{NC}_6\text{H}_4\text{CH}(\text{OAc})\text{CH}(\text{OH})\text{C}_6\text{H}_4\text{CO}_2\text{Na}$  (II) in 80% yield in 2 steps. I is diastereomeric: m. 102-3° from water, 132-5° from alc.-light petr. The lower-melting form is converted into the higher-melting form by warming on the water bath. Both forms can be used in the next step. I with  $\text{CrO}_3$  in  $\text{Me}_2\text{CO}$  gives  $\text{m. } (-)-\text{t-O}_2\text{NC}_6\text{H}_4\text{COCH}(\text{NaAc})\text{CH}_2\text{OAc}$  (III), m. 147-8°,  $[\alpha]_D^{25} -21^\circ$  (8%  $\text{CHCl}_3$ ), yield 70%.  $\text{p-O}_2\text{NC}_6\text{H}_4\text{CO}_2\text{Na}$  is the by-product. Attempts to racemize III were unsuccessful. In  $\text{C}_6\text{H}_5\text{N}$  or  $\text{AcOH}-\text{AcONa}$ ,  $\text{AcOH}$  splits off and  $\text{p-O}_2\text{NC}_6\text{H}_4\text{COCH}(\text{NaAc})\text{CH}_2\text{OAc}$  (III) is formed, m. 135-5°. *Na*

(6VER)

Meerwein reduction of II there is no racemization but the ester is hydrolyzed and gives the active *erythro*-monooacetate. I can be hydrolyzed with 5*N* HCl to *p*-(*-*)-*p*-NO<sub>2</sub>-C<sub>6</sub>H<sub>4</sub>COCH(NH<sub>2</sub>Cl)CH<sub>2</sub>OH (IV), m. 203-4° (decompn.),  $[\alpha]_D$  -80° (*c* 2%, *N* HCl). *p*-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>COAc (V) is formed as a by-product in 10% yield, m. 90-3°. V can be prep'd. from III and IV with concd. HCl. IV must not be isolated but is acetylated *in situ* with Ac<sub>2</sub>O-AcONa giving *p*-(*-*)-*p*-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>COCH(NHAc)CH<sub>2</sub>OH (VI), m. 160-1°,  $[\alpha]_D$  -20° (*c* 3%, EtOH). VI racemizes in C<sub>6</sub>H<sub>6</sub>N at room temp. in 60-70% yield, the by-product being III. VI yields *threo*-*p*-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH(OH)CH(NHAc)CH<sub>2</sub>OH by Meerwein reduction in 30% yield. The configuration of the compds. with 2 asym. C atoms is referred to the C atom bearing the OH group (g); the configuration of the compds. with 1 asym. C atom is referred to the C atom bearing the NH group (s).

W. M. Potts

✓ 18. Studies on chloramphenicol. II. Synthesis of 1-phenyl-3-aminopropane-1,2-diol derivatives. (In German) J. KOLIBITZEN, A. BIBIOA, M. KREUT, V. TAKOB  
Acta Chimica Academiae Scientiarum Hungaricae Vol. 67  
1955, No. 3-4, pp. 381-395, 2 figs.

*Chem*

The attempted synthesis of chloramphenicol starting from cinnamic alcohol and its derivatives led to the isomeric 1<sup>1</sup>-p-nitrophenyl-3-dichloroacetanilidopropane-1,2-diol compound instead. To obtain the suitable bromo-methylates the dibromo derivatives of p-nitro-cinnamic alcohol and its trityl ether were prepared as the first stage however upon treatment with sodium methoxide these compounds yielded unsaturated bromine derivatives instead of the desired compounds. Therefore a new method was elaborated which essentially consists in the addition of the elements of methyl hypobromite to the reaction mixture in the presence of yellow lead oxide. Aminolysis of the trityl derivatives of the bromo-methylates obtained in this way yielded only the corresponding enol-ethers. The 3-phthalimide derivatives were produced by fusing the bromo-methylate derivatives containing a free hydroxyl group with phthalimide potassium. Similar results were attained by treating the acyl derivatives in the same way. The compound 1-p-nitrophenyl-3-aminopropane-1,2-diol was prepared by way of demethylation of the corresponding deacetylated compound. The structure of this aminopropane-diol derivative was proved by the periodate oxidation of its N-p-nitrobenzoate derivative. The chloramphenicol isomeride obtained by the dichloroacetylation of the 1-p-nitrophenyl-3-aminopropane-1,2-diol compound showed no bacteriostatic activity.

*PM*

*SA BOR*

✓ Alkaline earth borohydrides and their applications in organic synthesis. I. Baumgärtel, O. Fuchs, and M. Müller. Reprinted from: Chem. Technol. Rottweil 1980, 7, 173-175 (1981). The original article is available in the osti.gov database.

Alkaline earth borohydrides are a class of borohydrides that are characterized by their ability to reduce organic molecules. They can be used in hydroboration-oxidation reactions at low temperatures, the selectivity is greater than that of LiAlH<sub>4</sub>. However, there is a danger of explosion or ignition.

Alkaline earth borohydrides can be reduced by  $\text{LiAlH}_4$  and  $\text{LiBH}_4$  esters, such as  $\text{LiBH}_4(\text{C}_2\text{H}_5)_2$  (II),  $\text{LiBH}_4(\text{C}_2\text{H}_5)_3$  (III),  $\text{LiBH}_4(\text{C}_2\text{H}_5)_2\text{N}$  (IV), and  $\text{LiBH}_4(\text{C}_2\text{H}_5)_2\text{NPF}_6$  (V).

$\text{LiAlH}_4$  does not reduce III. Alkaline earth borohydrides are reduced by  $\text{LiAlH}_4$  and  $\text{LiBH}_4$  esters, such as  $\text{LiBH}_4(\text{C}_2\text{H}_5)_2$  (II),  $\text{LiBH}_4(\text{C}_2\text{H}_5)_3$  (III),  $\text{LiBH}_4(\text{C}_2\text{H}_5)_2\text{N}$  (IV), and  $\text{LiBH}_4(\text{C}_2\text{H}_5)_2\text{NPF}_6$  (V).

Alkaline earth borohydrides are reduced by  $\text{LiAlH}_4$  and  $\text{LiBH}_4$  esters, such as  $\text{LiBH}_4(\text{C}_2\text{H}_5)_2$  (II),  $\text{LiBH}_4(\text{C}_2\text{H}_5)_3$  (III),  $\text{LiBH}_4(\text{C}_2\text{H}_5)_2\text{N}$  (IV), and  $\text{LiBH}_4(\text{C}_2\text{H}_5)_2\text{NPF}_6$  (V).

Chem. A. Borchardt

**Chloramphenicol series. II. Synthesis of the derivatives of 1-phenyl-1,2-dihydroxy-3-amino-*n*-epane.** J. Kollonitsch, Jr.

*Kolbnitsch, J. H. J., B. K. K. Raut, M. J. Gabor, Y. G.*

gave 46 g.  $\rho$ -O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH(OMe)HC(OH)CH<sub>2</sub>N(C<sub>6</sub>H<sub>4</sub>Cl)<sub>2</sub>  
C<sub>6</sub>H<sub>4</sub>-e (IX). ClCPH<sub>3</sub> and IX failed to react. VIII (13.55  
g.) in 20 ml. abs. pyridine added to 13.5 g. ClCPH<sub>3</sub> and the  
mixt. poured after 12 hrs. into ice H<sub>2</sub>O gave 8.3 g.  $\rho$ -O<sub>2</sub>  
NC<sub>6</sub>H<sub>4</sub>CH(OMe)CHBrCH<sub>2</sub>OCPh<sub>3</sub> (X), m. 138-40° (from  
EtOH). X did not react with VIIa. Heating X with  
CuCN 1 hr. at 150-60° then 4 hrs. at 160-200° did not give  
a nitrile. X (1.1 g.) heated with 80 ml. 8% NH<sub>3</sub>-EtOH and  
0.03 g. KI in a sealed tube 30 hrs. at 170° and the dark resi-  
due evapd. and crystd. from EtOH give  $\rho$ -O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>C-  
(OMe):CHCH<sub>2</sub>OCPh<sub>3</sub> (XI), m. 160-8°; th. not ether struc-  
ture was identified by bromination. An  $\epsilon$  <sub>max</sub> to cleave  
Br from X by heating with alc. NH<sub>3</sub>-Cu or with liquid NH<sub>3</sub>-  
Cu in a sealed tube failed. IX (33.5 g.) in 320 ml. hot abs.  
EtOH heated 2 hrs. with 20 g. NaH, H<sub>2</sub>O in 209 ml. abs.  
EtOH on a steam bath, the pptd. phthalylhydrazide (14 g.)  
filtered off, the filtrate evapd., and the residue dried *in*  
*vacuo*, extd. with *N* HCl, the ext. shaken with CHCl<sub>3</sub>, then  
made alk. with NaOH, again extd. with CHCl<sub>3</sub>, and evapd  
and the residue dried gave 16.5 g. pale pink, cryst.  $\rho$ -O<sub>2</sub>  
NC<sub>6</sub>H<sub>4</sub>CH(OMe)CH(OH)CH<sub>2</sub>NH<sub>2</sub> (XII), m. 116-17°; *N*-  
Ac deriv., m. 167-80° (from H<sub>2</sub>O). XII on oxidation with  
HIO<sub>4</sub> gave  $\rho$ -O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH(OMe)CH<sub>2</sub>CHO, oil, turning red  
on exposure to air;  $\rho$ -nitrophenylhydrazone, m. 168-70°  
XII (0.35 g.) heated 90 min. with 2.5 ml. CHCl<sub>3</sub>CO<sub>2</sub>Me on  
a steam bath, the mixt. evapd. *in* *vacuo*, and the residue  
crystd. from petr. ether gave 0.46 g.  $\rho$ -O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH(OMe)-  
CH(OH)CH<sub>2</sub>NHCOC<sub>2</sub>Cl, m. 111-12° (from AcOEt).  
XII (2 g.) reduced 1 hr. with 10 ml. 56% HBr, the mixt  
evapd. *in* *vacuo*, the residue heated 1 hr. in an N atom, extd.  
with CHCl<sub>3</sub> and AcOEt, made alk. with NaOH, and aga-

Kollenbach, H. J.; Kraatz, M.; Gabow, V.

shaken with  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>COCl (XIIa) in 169 ml. Et<sub>2</sub>O with ice-cooling gave 147 g.  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH(OH)C<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>CH<sub>3</sub> (XIIIa) in 40% yield (from Et<sub>2</sub>O, 40%). Powd. XIIIa (0.31 g.) and 0.27 g. HgCl<sub>2</sub> in 1 ml. H<sub>2</sub>O shaking 2 days at room temp. gave a crystal. filtr. of  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CHO, m. 105-7°; 0.19 g.  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CONHCH<sub>2</sub>CHO, m. 125-7°. was extd. from the mother liquor with AcOH.  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CONHAc was extd. from the mother liquor with AcOH.  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CONHAc was not cleaved by HgCl<sub>2</sub>. The eq. mother liquor from XIII extd. with AcOH and the ext. dried on a v. gave 1.6 g.  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Cl (XIV), which 1 g. heated 2 hrs. with 2 ml. CHCl<sub>3</sub> / Me<sub>2</sub>CO on a water bath, 20 ml. AcOH added, the mixt. cooled to 5 ml. ice-cold, gave  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Cl, m. 103-5°. VIII of 0.3 g. in 10 ml. Et<sub>2</sub>O, shaking kept 12 hrs. with 0.5 g. XIIIa (0.31 g.) CHCl<sub>3</sub>, the soln. evapd. on a rotav. and the residue washed several times with Et<sub>2</sub>O gave 0.15 g.  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NO<sub>2</sub> (XV), m. 121-3° (from Et<sub>2</sub>O); XV (1.0 g.) in 100 ml. of Et<sub>2</sub>O with 2.6 g. VIIIa, the mixt. shaken 12 hrs. free of Br, dried, and extd. with Et<sub>2</sub>O HgCl<sub>2</sub> gave 0.1 g.  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NO<sub>2</sub> -  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NO<sub>2</sub> (XVI), m. 150-6°. XV (1.0 g.), 8 ml. AcOH, and 10 ml. 5% HCl refluxed 8 hrs. at 120°, the soln. evapd. at 60° in *cavac*, 10 ml. H<sub>2</sub>O added to the residue, the mixt. filtered, the filtrate extd. twice with CHCl<sub>3</sub>, made alkal. and extd. and the basic ext. with CHCl<sub>3</sub>, evapd. gave 0.04 g.  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NO<sub>2</sub> (XVII). Yellow PBO (2.4 g.) in 20 ml. MeOH, 1.01 ml. Br, and 3.54 g. I gave oily  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NO<sub>2</sub> (XVIII), which crystallized after a few weeks to  $\rho$ -O<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NO<sub>2</sub>, m. 130-5°; this with VIIIa gave a black viscous material. *Cinn.* by 36 g. PBO in 200 ml. MeOH, 4.3 ml. Br, and 40 g. I gave

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*Kollonitsch, J. Haiges, H. Kraus, M. Gatory*

XVII (39.1 g., 7.5 ml. abs. pyridine) and 50 ml.  $\text{CHCl}_3$  mixed with 17.1 g. VIIa with ice-cooling, the mixt. kept overnight at room temp., the  $\text{CHCl}_3$  evapd., the residue treated with ice  $\text{H}_2\text{O}_2$  and the crystals washed with EtOH and recrystd. from abs. EtOH gave 21.2 g.  $\text{PhCH}(\text{OMe})-\text{CHBrCH}_2\text{OC}_6\text{H}_4\text{NO}_2-p$  (XVIII), m. 107°. XVIII (20 g.) and 7.4 g. VIIa stirred at 170° and the mixt. extd. with  $\text{H}_2\text{O}$  and crystd. from abs. EtOH gave 7.6 g.  $\text{PhCH}(\text{OMe})-\text{CH}(\text{O}_2\text{C}_6\text{H}_4\text{NO}_2-p)\text{CH}_2\text{N}(\text{CO})_2\text{H}_2$  (XIX), m. 164-5°. XIX (0.1 g.) refluxed with 20 ml. abs. EtOH and 20 ml.  $N\text{H}_3\text{H}_2\text{O}_2$ , the EtOH evapd., and the residue worked up yielded 3.42 g.  $\text{PhCH}(\text{OMe})\text{CH}(\text{O})\text{CH}_2\text{N}(\text{H})\text{HOCC}_6\text{H}_4\text{NO}_2-p$ , m. 140-1° (from  $\text{C}_2\text{H}_5\text{O}$ ).  $\text{Me}_2\text{COCl}$  (5.4 g.) dropped into 6.7 g. IIa, 0.1 g. cryst.  $\text{PhSO}_2\text{H}$ , and 50 ml. abs. EtOH at 10-15°, the mixt. refrigerated overnight and evapd. *in vacuo*, and the residue dried to const. wt. and distd. at 110°/1 mm. ave 5 g.  $\text{PhCH}(\text{OMe})\text{CHCH}_2\text{OH}$ . XVII (20 g.) in 60 ml. abs. pyridine treated with 23 g.  $\text{ClCPh}_3$  gave 22.04 g.  $\text{PhCH}(\text{OMe})\text{CHBrCH}_2\text{OCPh}_3$  (XX), m. 110-12° (from EtOH). XX (1 g.) boiled with 15 ml.  $\text{H}_2\text{O}$  in a sealed tube at 80° to remove Br, but heating 5 g. XX, 2 g. KOH, and 50 ml. abs. EtOH 7 hrs. at 100°, evapd. the mixt., and ext. the mixt. with  $\text{H}_2\text{O}$  gave  $\text{PhCH}(\text{OMe})\text{CHCH}_2\text{OCPh}_3$ , m. 139-42° (from EtOH); further heating with  $\text{NH}_3\text{Na}$  at 120° in a sealed tube failed to split out  $\text{MeO}$ .  $\text{PhCH}(\text{OMe})\text{CHCH}_2\text{OH}$  (17.5 g.) (from IIa and PhO-iodine) in 36 ml. abs. pyridine let stand overnight with 17.4 g.  $\text{ClCPh}_3$ , the mixt. treated with ice  $\text{H}_2\text{O}_2$ , and the product (33.2 g.) recrystd. from EtOH gave 16.5 g.  $\text{PhCH}(\text{OMe})\text{CHCH}_2\text{OCPh}_3$ , m. 141-5°; heating this with 10%  $\text{NH}_3\text{-EtOH}$  in a sealed tube failed to remove the iodine. J. Ev. M.

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*PM WT*

GABOR, V.; KOLLONITSCH, J.; HAJOS, A

Investigations in the field of chloramphenicol. IV. A new synthesis of chloramphenicol. In German. p. 239. ACTA CHEMICA. (Magyar Tudomanyos Akademia) Budapest. Vol. 10, no. 1/3, 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 5, No. 12, December 1956.

*Gabor, V.*

✓ New methods for the synthesis of peptides. J. Kollo-nitsch, V. Gábor, and A. Hajós (Research Inst. Pharmaceutical Ind., Röttebiller, Budapest). *Nature* 177, 841-2 (1958).—The PhCS (I) group is used for the protection of the amino groups of amino acids. I is then split off from the N-PhCS peptide derivs. by oxidative methods. Oxidation is carried out with 2.5 moles  $B_2O_3H$  at  $-5^\circ$  in  $AcOH-C_6H_6$ ,  $C_6H_6$ -tetrahydrofuran, dioxane, or dioxane contg. preferably 3% water. The products of oxidation probably represent a type of mixed anhydrides of carbamic acids with sulfinic acids hitherto unknown. With water this type of compd. disintegrates immediately with the evolution of  $CO_2$ , and the corresponding peptides or amino acids are isolated in excellent yield by absorption to a Dowex 50 cation-exchange resin and elution with dil.  $NH_4$ . Peptides were also prep'd. using MeCS amino acids. With  $PhCH_2Cl$  however, the amino acids and peptides were smoothly acylated. The syntheses of a no. of peptides is discussed.

M. W. Smith

*Hand 3*

GÁBOR, V.

3  
Caloramphenicol. IV. New synthesis of chloramphenicol. V.  
Gábor, J. Kollonitsch and A. Hajós (Acta chim. hung., 1956, 10, 239-244). *trans*-Cinnamic alcohol methyl ether is treated in methanol with  $PbO_2$  and Br to give *erythro*-2-bromo-1:3-dimethoxy-1-phenylpropane. Ammonolysis gives *threo*-2-amino-1:3-dimethoxy-1-phenylpropane, whose structure is confirmed by its identity with the product obtained by methylating the corresponding dihydroxy compound. Acetylation, nitration and deacetylation give the *p*-nitro derivative, which can be resolved into optical isomers with dibenzoyltartaric acid. Demethylation of the base with HfBr gives *threo*-2-amino-1:3-dihydroxy-1-*p*-nitrophenylpropane which can be dichloroacetylated with Et 1:1-dichloro- or 1:1:3:3-tetrachloro-acetoacetate to give chloramphenicol.

A. B. DENSHAM

GARRETT

Papir og Nyomdateknika  
Paper and Printing  
vol. 2 1950  
no. 11 november

. 40.5.7.19

## The Great Socialist October Revolution in the photo.

~~The Conference of the Association of  
Paper and Printing Engineers held at  
Salford on December 1, 1923.~~

## AMERICAN METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000513920015-5"

HUNGARY/Theoretical Physics - Relativity. Unified Field Theory. B

Abs Jour : Ref Zhur - Fizika, No 8, 1959, 17014

Author : Gabor, Zoltan

Inst : -  
Title : Contribution to a Study of the Metric of Space in the  
Theory of Relativity

Orig Pub : Kolozsvari eyyet. kozl. Termeszettud. sor., 1957, 2,  
No 1-2, 59-67

Abstract : The author investigates weak interaction of two gravitating masses in the absence of external gravitational fields. An expression is obtained for the displacement of the perihelion of mercury, which agrees with the ordinary expression. It is stated that the gravitational field consists of a field of the electric type and a field of magnetic type, and the identification of the gravitational field of the magnetic type with the intrinsic magnetic field of celestial bodies being considered

Card 1/2

HUNGARY/Theoretical Physics - Relativity. Unified Field Theory. B

Abs Jour : Ref Zhur Fizika, No 8, 1959, 1701<sup>4</sup>

lacking of any foundation, in the author's opinion. It is concluded from this that Blackett (Blackett, P.M.S., Nautre, 1947, 159, 658) did not discover the origin of stellar magnetism, but the gravitational moment of celestial bodies. It is shown that the mass of a material point in a weak gravitational field depends not only on its velocity, but also on the gravitational potential. -- A.Ya. Terkin

Card 2/2

- 2 -

L 475.22-66

ACC NR: AT6038900

SOURCE CODE: HU/2502/66/047/002/0129/0136

AUTHOR: Schulek, E.--Shulek, E. (deceased), Barcza, Lajos--Bartsa, L. (Doctor), Gabor-Fehér, Nagda--Gabor-Fekher, M. and Ladanyi, László--Lodani, L., of the Department for Inorganic and Analytical Chemistry at L. Eotvos University in Budapest.

"Reaction of Disulfur Dichloride and Sulfur Dichloride with Cyanide; Their Determination through Thiocyanate" 15  
871

Budapest, Acta Chimica Academiae Scientiarum Hungaricæ, Vol 47, No 2, 1966, pp 129-136.

Abstract: [English article] In the reaction of disulfur dichloride with cyanide, thiocyanogen forms first. The product then oxidizes the excess cyanide to paracyanogen by transforming into thiocyanate. The reaction of sulfur dichloride proceeds in a similar manner. The findings were utilized in the development of an analytical technique for the determination of disulfur dichloride and sulfur dichloride by determining the amount of thiocyanate formed. This latter determination is accomplished by iodometry.

Orig. art. has: 10 formulas and 2 tables. [JPRS: 36,002]

TOPIC TAGS: cyanide, chloride, sulfur compound, thiocyanate, quantitative analysis

SUB CODE: 07 / SUBM DATE: 08 Dec 64 / OTH REF: 007 / Sov REF: 001

Card 1/1

CZECHOSLOVAKIA

GABORCIK, Stefan; Seed Growing Station (Slachtitelska Stanica)  
Levocske Luky.

"Investigation of Some Physiological Relations in Grass Grown for  
Seed."

Bratislava, Biologia, Vol 21, No 7, 1966, pp 493 - 502

Abstract: Mechanical properties of seed grasses grown at the station at Levocske Luky were investigated. The following grasses were studied: Phleum pratense, Festuca rubra, Festuca pratensis, Arrhenatherum elatius, Trisetum flavescens, Poa pratensis, Poa palustris, Alopecurus pratensis, Agrostis stolonifera, and Lolium perenne. The yield of leaves, the relationship between leaves, and stems, and the chlorophyll content of the grasses are discussed. Dry matter consists mainly of dried grass leaves. 1 Figure, 6 Tables, 1 Western, 5 Czech references. (Manuscript received 14 Dec 65).

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GABORIANU, G., Ing.; CHIRGHIU, C., Ing.; M. V. S. G., Jr.

Study on the influence of the geometry of the ~~armored~~ elements  
on dry material crushing in ball mills. Rev construi mat constr  
16 no. 3:126-135 Cr'64

GABORI, T.

Hog breeders should prepare plans for coupling. p. 21. (Magyar Mezogazdasag, Vol. 11, no. 5, Mar. 1956 Budapest)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

GABORICH, R.D., prof. (Kiyev)

"Sanitary protection of air against the waste of enterprises  
of ferrous metallurgy" by D.N.Kaliuzhnyi. Reviewed by R.D.  
Gabovich. Vrach delo no.7:152-153 J1'63. (MIRA 16:10)  
(AIR—POLLUTION) (INDUSTRIAL WASTES)  
(KALIUZHNYI.D.N.)

Gáborik, J.

Influence of cobalt chloride on peripheral blood of dogs.  
M. Nikš and J. Gáborik (Komenského Univ., Bratislava, Czech.), *Bratislav. Lekárske Listy* 33, II, 681-97 (1955).—  
Dogs fed with daily doses of 2 mg. and 4 mg. CoCl<sub>2</sub> per kg. of body wt. for 8 weeks showed gradual increase in the values of the red blood component, reaching max. towards the end. On the 20th day a significant reticulosis (I) occurred (av. increase of 806%) which was followed by an increase of the erythrocyte count (II) by 23.5% on the av. On simultaneous administration of Fe the amt. of hemoglobin (III) increased also (by 13.8%). The amt. of ch. diluting blood increased by 10.6 ml./kg. of wt. The hematocrit value of erythrocytes increased by 5.6 points, the viscosity of blood rose from 4.3 to 5.6. Slight microcytosis and a tendency towards hypochromia was observed in these dogs. In a group receiving 2 mg. CoCl<sub>2</sub>/kg. intravenously the increase of I and II was less significant (by 100% and 13.4% resp.) but a significant rise was observed in the amt. of III

(by 25%) and the erythrocytes showed tendency towards hyperchromia. Intravenous application of CoCl<sub>2</sub> produced unfavorable symptoms: increase of the pulse rate, acceleration and deepening of respiration, nausea, vomiting and sometimes collapse. Neither peroral nor intravenous administration of CoCl<sub>2</sub> effected any changes in the no. and the differential count of leucocytes, nor in the body wt. of the animals. Another group receiving 10-20 γ vitamin B<sub>12</sub>/kg. subcutaneously for 2 weeks did not reveal any significant changes in the compn. of peripheral blood. Peroral administration of daily doses of 2 mg. CoCl<sub>2</sub>/kg. was found suitable for exptl. production of polyglobulism in dogs caused by neof ormation of erythrocytes (IV). Intravenous application is not recommended for its smaller effect on IV and because of the untoward effects and the danger of toxicity.

L. J. Urbánek

(1)

Gáborík, J.

✓ Regeneration of erythrocytes under the influence of cobalt salts. M. Niks and J. Gáborík (Komenský Univ., Bratislava, Czech.). *Bratislavské Lekárske Listy* 39, 203-15 (1958).—In dogs that had been given per os 3 mg.  $\text{CoCl}_2/\text{kg}$ . a day for several weeks prior to acute bleeding, the erythrocytes recovered the initial values by 10-14 days earlier than in control animals. Histopathol. examn. revealed that long-term administration of Co did not cause any changes in the liver, spleen, pancreas, kidneys, lungs, myocardium, or bone marrow. Oral application of 100 mg.  $\text{CoCl}_2$  daily to anemic patients was partly successful; however, the mechanism of the effect has not yet been elucidated and requires further exptl. work. J. Uthinek

21

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and Pathological). Nervous System. Higher Nervous Activity. Behavior.

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 27039

Author : Niks, M., Cagan, S., Gaborik, J.  
Inst : -

Title : Conditioned-Reflex Changes to ECG Experimental Animals.

Orig Pub : Bratislav. lekar listy, 1957, 2, No 12, 714-719

Abstract : After 5 combinations of conditioned stimulus with electroshock in 3 of 4 dogs, change of cardiac rate was observed, and on ECG - changes of PQ interval, T-wave, ST-segment in action of conditioned signal. The obtained data proves the presence of central regulation of cardiac activity.

Card 1/1

~~RECERITA MEDICA 8~~ Vol 12/2 Neurology Feb 59

779. CONDITIONED-REFLEX CHANGES IN THE PERIPHERAL BLOOD  
PICTURE AFTER SHAM ELECTROSHOCK - Podmienenoreflexné zmeny  
v morfologickom zložení periférnej krvi po imitácii elektrošoku - Nikš  
M. and Gáborík J. Št. pre Všeob. a Exp. Patol. Lek. Fak., Univ.  
Komenského, Bratislava - BRATISL. LEK.LISTY 1958, 38/3 (136-144)  
Graphs 9 Tables 2

An increase of the erythrocyte count by an average of 9.6% ( $P > 0.05$ ) with a reticulocyte reaction was observed 15 min. after electroshock in dogs. The white count showed neutrophil leucocytosis with a shift to the left (increase 32.4%;  $P > 0.001$ ) which was most marked 3 hr. after the shock. After 10 electroshocks had been applied, imitation of the procedure was sufficient to cause these blood changes. Participation of the higher levels of the CNS in the reaction is supported by the fact that the conditioned reflex for the blood-cell reaction was extinguished after a certain time with isolated action of the complex conditioned stimulus. Differentiation of the conditioned stimulus (arrangement of the experiment) was successful in one dog.  
(II, 5, 8)

~~THE EFFECT OF THERAPY ON MOTILITY OF AN INTESTINAL~~

G-ABORIK J.

Country : Czechoslovakia T  
Category : Human and Animal Physiology, Blood  
Aba. Jour. : Ref Zhur - Biol., No. 2, 1959, No. 7899  
Author : Nikš, M.; Sábovák, J.  
Institut. : --  
Title : The Dynamics of the Changes in the Morphological Composition of the Peripheral Blood of Dogs Following Electroshock.  
Orig Pub. : Bratisl. lekar. listy, 1958, 4, No. 1, 11-21  
  
Author : As early as 15 minutes after dogs were subjected to electroshock, the erythrocyte count increased by 9.6%. A reticulocyte reaction was noted, as well as neutrophilic leukocytosis with a band-cell shift. The rise in the leukocyte count occurred in two phases--at the 15th minute (by 17.7%) and at the 180th minute (by 32.4%). In splenectomized dogs following electroshock, neutrophilic leukocytosis with a band-cell shift was observed, reaching a maximum at three hours. These changes are explained by the redistribution and regeneration

Country : Czechoslovakia  
Category : Human and Animal Physiology, Blood T  
Abo. Jour. : Ref Zhur - Biol., No. 2, 1959, No. 7899

Author :  
Institut. :  
Title :

Orig. Pub. :

Abstract : tion of the formed elements of the blood.

Copy 1

2/2

NIKS, Milan; STEFANOVIC, Jan; CAGAN, Stanislav; GABORIK, Jozef; HULIN, Ivan

At attempt to influence certain biological properties of blood cells  
and blood serum by electric shock. Biologia 15 no.6:438-444 '60.

(EEAI 9:10)

1. Katedra experimentalnej patologie a farmakologie Lekarskej  
fakulty Univerzity Komenskeho, Bratislava.

(ELECTRIC SHOCK)

(BLOOD)

(SERUM)

(PHAGOCYTES)

NIKS, Milan; GABRIK, Josef; HULIN, Ivan

Leucocytosis after intake of food. Biologia 15 no.7: 516-524 '60.  
(EEAI 10:2)

1. Katedra experimentalnej patologie a farmakologie Lekarskej  
fakulty University Komenskeho, Bratislava.  
(LEUCOCYTOSIS) (FOOD)

GABOR-JAY, E.

Production and use of reinforced- concrete railroad ties in Hungary. p. 441.  
Vol 5, no. 12, Dec. 1955. KOZLEKEDESTUDOMANYI SZEMLE. Budapest, Hungary.

So: Eastern European Accession. Vol 5, no. 4, April 1956

L 01194-66 EPF(c)/EPF(n)-2/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5025813

HU/0005/65/071/006/0248/0251

AUTHOR: Schulek, Elemer; Barcza, Lajos; Ladanyi, Laszlo; Gaborne Feher, Magda 17 B

TITLE: Data on the analytical control of technical-grade thionyl chloride

SOURCE: Magyar kemiai folyoirat, v. 71, no. 6, 1965, 248-251

TOPIC TAGS: analytic chemistry, thionyl chloride, sulfur compound, chloride 27

ABSTRACT: Thionyl chloride, sulfonyl chloride, and disulfur dichloride were determined in technical-grade thionyl chloride by hydrolyzing the ingredients in an alkaline medium in the presence of cyanide ions to sulfites, sulfates, and thiocyanate, respectively, followed by the analytical determination of the products according to standard techniques. The procedures involved in the determination were described and numerical results were presented to illustrate the accuracy of the method. Orig. art. has: 1 figure, 2 tables.

ASSOCIATION: Eotvos Lorand Tudomanyegyetem Szervetlen- es Analitikai-Kemial Tanszeke, Budapest (Department of Inorganic and Analytical Chemistry, Eotvos Lorand Scientific University)

SUBMITTED: 01Dec64

ENCL: 00

SUB CODE: IC, GC

NR REF SOV: 000

OTHER: 006

JPRS

Card 1/1 Kc

*GABOS, B.*

Purification of industrial sugar solutions by ion exchange carried out on the ammonium cycle. S. Vajna and [Mrs.] B. Gabos (*Cukoripari Kutakaindusz Kozleményei* [Suppl. to *Cukripari*], 1954, 1, 38-30).—Pilot plant tests were made of molasses purification using a cation-exchanger  $\text{NH}_4^+$  and an anion-exchanger  $\text{OH}^-$ . The  $\text{NH}_4$  in the purified liquor is removed by boiling; the purity is raised from 60 to 80. Residual impurities: betaine, amino-acids, and Ca are removed by further treatment with an acid cation-exchanger and a weak anion-exchanger and the purity reaches 98. The regeneration of the ammonium cycle exchangers is described. Analytical data are given in tables and graphs, costs are considered and the literature is surveyed. (100 references, 143 patents.)  
Sug. Ind. Anstr. (E. M. J.).

(-Abcs, B.

98. Batch process for the purification of beet juice.  
S. Vajna, B. Gabos, Cukoripari Kutatásintézet Köz-  
lembnyel, Vol. 2, 1955, No. 2, pp. 80-83, 1 fig., 2 tabs.

2

Based on experimental findings it was established that not only the pH range between 10.8 and 11 was suitable for the preclarification process but a pH optimum existed for this procedure about 1 to 1.5 pH below the above stated values. In order to secure filtration calcium carbonate mud prepared separately was added simultaneously to the juice during the coagulation of the colloids. The quantity of this mud was generally less than that currently produced during the primary carbonation of juices. The carbonation juice thus obtained was heated to boiling temperature in order to aggregate the well coagulated colloids. The calcium carbonate employed was produced either by processing the regenerating solutions obtained during the ion exchange procedure carried out in ammonia cycle or by the common carbonation of the thin juice. The speed of filtration with these clarified juices was 2 to 3 times greater than those encountered during industrial operations currently employed. The composition of these juices was found to be identical with that of the Silin juices.

CODE/NO.	: 101-101
CATEGORY	: Chemical Technology. Chemical Products and Their Uses. Part 2. Carbohydrates and Their
ABS. JOUR.	: RZhKhim., No. 1 1960, No. 2654
AUTHOR	: Vajna, J.; Gabos, B.
TYPE	: -
TITLE	: Purification of Molasses by Ionized <sup>Ca</sup> in an Aromatic Cycle
ORIG. PUB.	: Cukoripari Kutatoint. Mag., 1956, 3, No 1, 56-64
ABSTRACT	: The abstract

<sup>\*\*</sup>Proceeding  
<sup>\*\*</sup>For exchange only

APR: 1/1

GABOS, Gyorgy, dr.

Conference on the training of specialized engineers for the construction industry. Magy ep ipar 12 no.9:385-387 '63.

**GABOS, Gyorgy, dr.**

News of the Headquarters of the Scientific Association of  
the Building Industry. Magy ép ipar 13 no.11:632 '64.

1. Secretary General, Scientific Association of the Building  
Industry.

GABOIS, Gyorgy, dr.

Preparation of Industry settlement. Must vlet 20 n.o. 17  
14 Ju '65.

1. Enterprise of Geodesy and Sci Research of the Ministry  
of Construction, Budapest.

GAJOS, GY.

The Gorki conference on soil mechanics and foundations and the science of soil mechanics in Hungary. p. 478.

Vol. 4, no. 9, Sept. 1954.  
MELYEPITESTUDOMANYI SZEMLE  
Budapest

SOURCE: Monthly list of East European Accession, (EEAL), 'C, Vol. 5,  
No. 3, March, 1956

1  
VARDAY, Gyorgy, dr.; BICZOK, Imre; OCSVAR, Rezso; LANTOS, Zoltan; SZIMELY, Karoly; HERENYI, Akos, dr.; FEHER, Gyula; GALLI, Laszlo; BAKOS, Laszlo; CZIGLINA, Vilmos; GABOS, Gyorgy; SZILAGYI, Gyula; RONAI, Andras; KOVACS, Gyorgy; BACHMANN, Alfredy STEGMULLER, Jozsef; RETHATI, Laszlo; NAGY, Zoltan.

Hydrological questions of the construction industry in Hungary.  
Hidrologiai kozlony 36 no.3:169-170 Je'56.

1. "Hidrologiai Kozlony" szerkeszto bizottsagi tagja (for Galli).
2. "Hidrologiai Kozlony" felelos szerkesztoje (for Kovacs).

GAROS, GY.

Foreign experiences in regard to the foundation of buildings on shrinking ground.

p. 233 (Melyepitesudoranyi Szemle, Vol. 7, no. 7/8, July/Aug. 1957, Budapest, Hungary)

Monthly Index of East European Accessions (EEAJ) LC. Vol. 7, no. 2, February 1958